

We have reviewed the latest draft MS4 permit for the San Francisco Bay Region (NPDES permit No. CAS612008) public noticed on December 29, 2007 and we would like to offer the following comments primarily regarding the New Development and Redevelopment Component of the permit (Part C.3).

In April 2007, EPA entered into an agreement with several national organizations to promote green infrastructure (which is very similar to LID) to improve stormwater quality management for MS4s. In January 2008, EPA also published an action strategy for the new initiative which is available at http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=6). The strategy encourages green infrastructure/LID requirements (such as bioretention, green roofs) in MS4 permits and we are trying to ensure that MS4 permits in our Region 9 include appropriate requirements to promote green infrastructure/LID. We are particularly interested in ensuring that green infrastructure/LID is adequately required and implemented in new developments and redevelopments, as the effectiveness of vegetation-based treatment for stormwater is clearly superior* to conventional treatment (such as detention basins, drain inlet inserts) which is covered in Part C.3.d of the permit; landscape-based treatment also has greater capacity to reduce the impact of spills. A wide range of other benefits of green infrastructure/LID was identified in our action strategy, and again we believe it is important that this be emphasized in permits. One of the elements of the strategy is the development of appropriate requirements for MS4 permits, but this is still a work in progress at the moment.

We have reviewed the green infrastructure/LID requirements in the proposed permit and except as noted below we believe they are appropriate for now. While the requirements for green infrastructure/LID in Part C.3.c are narrative, the issue is clearly emphasized in the permit. Further, the permit includes specific (and stringent) requirements on applicability in that they would apply to all new projects creating 10,000 square feet or more of impervious surface and (in the future) certain special categories of projects which create 5,000 square feet of impervious surface. As our green infrastructure/LID strategy is implemented we may have additional more specific recommendations concerning permit requirements and we would like to work with the Board concerning incorporation of such requirements in future permits or in existing permits via permit modifications.

The one concern we have with the LID requirements of the proposed permit is Part C.3.c.i.(2)(d) which requires "a portion" of impervious areas to be drained to a pervious area, and Part C.3.c.i.(2)(e) which

similarly requires for walkways and trails, etc. that "a portion" of such areas be constructed with permeable surfaces. To ensure adequate enforceability and clarity of the permit, we believe the permit needs to include a numeric value for the quantity of runoff which would be directed to pervious areas. We would suggest a requirement such as proposed in the August 2007 draft Ventura County MS4 permit which limits the effective impervious area of new developments to 5% of the total area of a project (see Part E.III.1.(a) of the draft Ventura County permit). We are not wedded to any particular numeric value; this could be determined based on local considerations, but we believe the requirements should be expressed quantitatively to ensure clarity and enforceability.

Elsewhere in the proposed permit, we are pleased to see that the permit includes detailed BMP requirements in many areas such as municipal maintenance, illicit discharges and industrial/commercial site controls. These requirements clarify MEP and improve the enforceability of the permit. Our municipal audits of recent years have identified lack of detailed requirements as a frequent shortcoming in previously-issued MS4 permits in our Region.

We also noted one element which we would suggest be strengthened in the permit. With regards to construction sites, NPDES regulations at 40 CFR 122.26(d)(2)(iv)(D)(4) require an education program on the part of MS4s for construction site operators. The permit does include staff training for MS4 personnel in conducting construction site inspections (Part C.6.g), but education for the construction industry itself is limited to providing educational materials (in Part C.6.d) and education during inspections (in Part C.6.e). We would suggest adding a new Part to the permit following your format (Task Description, Implementation Level and Reporting) which would require that the MS4s provide training workshops in the Bay Area for the construction industry with a minimum frequency of once/every other year (as with staff training) in which MS4s would explain municipal requirements for construction sites.

Thank you for the opportunity to comment on the draft permit. I can be reached at (415) 972-3510.

*See for example the analysis prepared by Dr. Richard Horner entitled "Initial Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for the San Francisco Bay Area" submitted to the San Francisco Bay Regional Board by NRDC. A similar analysis was also submitted to the Los Angeles Regional Board by NRDC attached to comments on the proposed Ventura County MS4 permit of December 2006.